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14. ABSTRACT

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Development of a Multilevel Prevention Program for Improved Relationship Functioning in Active Duty Military Members

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ABSTRACT The relationships and families of active duty (AD) service members have been tremendously strained by deployments and high operations' tempo. This study involves the first steps in developing a multilevel approach to preventing relationship problems that integrates universal, selective, and indicated prevention/intervention. Such an approach has tremendous empirical support for parenting problems, but no similar program exists for couple problems. We conducted two studies with U.S. Air Force Security Forces members. Study 1 elicited the target population's topics of highest interest. For almost all topics, 70% to 95% of participants who desired information reported being underserved by current prevention offerings (i.e., not receiving needed information). Using the top topics generated in Study 1, we developed prevention information/action planning sheets on 18 relationship issues. In Study 2, we had AD members who gave feedback on the form and content of the sheets. Overall, AD members believed that the sheets were moderately to very useful and were presented well, had pithy but comprehensive information and conveyed the content well. Results imply that a multilevel approach may be a useful complement to formal services in meeting underserved military members' needs and that further research and development of this dissemination vector for evidence-based information is warranted.

INTRODUCTION

Deployments to overseas theaters and high operations' tempo at home have placed a heavy strain on the relationships and families of active duty (AD) service members.[1] Relationship problems not only adversely affect AD members' adjustment and readiness,[2,3] but also are centrally implicated in suicides.[4]

A patchwork quilt of outreach (e.g., posters), informal information (e.g., peers, key spouses), and formal services (e.g., readiness centers, Military and Family Life Consultants, Family Advocacy Program, Military OneSource) have been created to serve AD couples and families. However, AD couples face a bewildering jumble of agencies, centered on installations that, by and large, ask the couple to adapt to each agency's organizational structure and way of doing business to receive services. Combine this set of hurdles with stigma about receiving services,[5] ambivalence about their necessity and worth, and the conundrum of prevention/resilience promotion (i.e., marketing/provision of services to people who generally do not need them at the moment), and military planners find themselves with an abundance of agencies, a dearth of family resilience, and less-ready AD members and families.

As an alternative, prevention science has provided the technology (how to harness and concentrate both provider and customer motivation) and the roadmap (how to design and execute prevention) to integrate universal, selective, and indicated prevention/intervention in a manner that provides community members what they need, when they need it, in the amount they want, and from whom they prefer to get it.

This approach is exemplified by Sanders' Triple P (Positive Parenting Program[6]), a cost-effective, comprehensive community strategy for parenting challenges that is aimed at (a) preventing problems at early (and less costly) stages, (b) providing on-demand services (e.g., discussion with respected community contacts) that likely would have been provided anyway, but standardizing the contact to ensure that it contains evidence-based components (i.e., disseminating effective and evident "light touches" at little to no additional financial or time cost), and (c) avoiding waste and overprovision of services to some and underprovision to others.

Sanders outlined five hallmarks of a multilevel approach. First, it simultaneously deploys a continuum of assistance for the whole population, from population-level information to on-demand brief consultation to prevention groups to individualized intervention. Second, integrating the continuum of prevention (a) ensures that the messages/approaches delivered

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at various levels of intervention are consistent and (b) encourages those who are in need of more intensive services to move up in a stepwise fashion and get the services they need. Third, it uses a self-regulation model,[7,8] which posits that self-agency is necessary for uptake of services. (When the focus is relationships, agency comprises concern for and improvements in both the self and the relationship.) Agency involves self-assessment and self-direction to obtain information/assistance and to apply that information/assistance to reduce risk and enhance resilience.

The empirical support for the multilevel approach is extremely impressive, with 91 total studies (including 28 randomized controlled trials of effectiveness and 4 independent meta-analyses[9–12]) and dissemination trials in 13 countries. All five levels of Triple P have been rigorously validated.[13,14]

However, no such program exists for couple problems. The goal of this project was to take the first steps toward such development. Because the broadest levels of a multilevel approach rely on self-directed uptake, the first step of development is to understand community members' topics of highest interest and for which they are most underserved by the current prevention offerings. This should be done both quantitatively and qualitatively (Study 1). Armed with these results, the next step would be developing information sheets (called "Action Sheets" in this study) that direct "light touch" brief help consultations and that motivate and organize interested members to plan an achievable action targeting areas in need of improvement. Community members can then provide feedback on the design and usability of the sheets (Study 2).

We conducted these studies in partnership with the U.S. Air Force (USAF) Security Forces. Research conducted by our group[15] on deploying USAF Security Forces members found that before deployment, 17% reported a clinically distressed marital (or similar intimate) relationship. In theater, this rate rose to 27%. An additional 25% of predeployment relationships ended during deployment. Thus, over half of Security Forces members' predeployment marriages/committed relationships dissolved or became severely troubled during deployment. Of great concern, 33% reported that relationship problems distracted them from their mission in theater; over 50% reported at least one adverse impact on mission readiness. At 6 to 9 months postdeployment, over 80% of relationships were clinically distressed or dissolved. Thus, because of both leadership concern over Security Forces' relationship impacts and because of the considerable challenges facing these members, this was an excellent group with whom to develop and obtain feedback on prevention materials.

STUDY 1: GENERATING RELEVANT ACTION SHEET TOPICS

Method

Both studies' procedures were reviewed by, and conducted in full compliance with, the USAF and University institutional review boards. No compensation was provided for participation.

Participants

Participants were a subset of a larger study (N = 318) involving two detachments of AD USAF Security Forces members deployed for 1 year during 2009 and 2010 to train Iraqi police, a high-risk mission that required patrolling in communities with insurgent fighters.

At 6 to 9 months postdeployment, they were invited to travel—with expenses paid by the USAF—to Lackland Air Force Base (AFB) to participate in focus-group discussions and complete follow-up measures, and 169 did so. Reasons for declining participation at the follow-up included having already separated from the military, not being able to travel and not being available for personal or work reasons, and exercising the right not to participate. Participants in this study (N = 112) reported being in a committed relationship lasting 6 months or longer at predeployment and completed measures at both pre- and postdeployment.

Participants ranged from 19 to 46 years of age (M = 25.4, SD = 5.7); 181 (93%) were male and 15 (7%) were female. The majority (67%) was self-identified as white (non-Hispanic), 12% as Hispanic, 11% as African American, 7% as Asian, and 3% as "other." Officers constituted 4% of the sample, with the other pay grades distributed as follows: 24% E1–E3 (junior enlisted), 65%; E4–E6 (midlevel enlisted or noncommissioned officers [NCOs]), and 7% E7–E9 (senior NCOs).

AD members who participated did not differ from the larger sample of 318 members assessed before deployment on any measure of demographic characteristics or predeployment measures of individual's emotional or behavioral functioning, or intimate relationship functioning (all p values > 0.50).

Procedures

Before completing measures, the research team informed participants about the purpose of the study and the voluntary nature of their participation.

At the postdeployment assessment, participants first completed an anonymous survey as part of the larger study. They then broke into small groups (approximately 10–15 members) to complete a short questionnaire and to participate in focus groups, both of which centered on the deployment's impact on their relationships, relationship-oriented prevention received, and ideas about how to improve prevention services for couples and families. Each focus group had up to two facilitators.

Measures

The questionnaire—for 11 predeployment, 5 postdeployment, and 11 postdeployment issues—asked participants, "Given your entire experience, predeployment, on deployment, and since returning, could you please indicate: (1) On a 5-point Likert scale, how useful it would have been/would be to

have resources or services of the types listed below; (2a) Whether you received information on this topic (please circle yes or no); and (2b.) If "yes" to 2a, how or by whom (e.g., command briefing, Internet, military treatment facility)."

The focus groups were introduced as follows: "The process of returning from a long deployment and adjusting to being back home with your spouse or significant romantic partner is different for everybody. (Some of you may have experienced the end of the romantic relationship you were in prior to your deployment). We're interested in learning what have been your biggest challenges to reuniting successfully with your spouse/romantic partner." Although discussion topics were allowed to develop organically, each focus group was asked the following: (1) "What are the problems you've faced in your relationship with your partner since returning from deployment?" (2) "If your relationship ended while you were deployed, what were the main reasons?" (Follow-up) "Was there help you did NOT receive that may have helped this relationship?" (3) "Were there any sources of help for reintegrating couples that you made use of? What worked for you?" (Follow-up) "What type of help for relationships did NOT work for you and your partner?"

Results

Questionnaires

On average, group members reported having received no information on more than three "considerably useful" or "extremely useful" topics. As shown in Table I, some notable predeployment unmet relationship needs included managing relationship conflict (81% "underserved" [i.e., indicated information would have been considerably or extremely useful but did not receive information on the topic]), talking with one's children (78.6% underserved), and maintaining a strong relationship (76.5% underserved). Important unmet relationship needs during deployment were how to tell if one's relationship is in trouble and how to handle it (96.3% underserved), fears of infidelity (94.7% underserved), and how to help your spouse if something goes wrong (93.3% underserved). A notable postdeployment unmet relationship need was recovering from infidelity (93.8% underserved).

Focus Groups

All the notes taken during the focus groups were reviewed. Similar themes were combined; the most common themes and the number of times the themes were noted across all groups (including groups of airmen not in relationships) are summarized in Table II.

Over one-fifth of comments centered on the lack of support and access for civilian spouses, divided fairly equally between lack of unit support for spouses, lack of continuity and a single point of contact, lack of access to resources while the AD member was deployed, spouse's subjective experience of isolation, and bureaucratic barriers to accessing services.

Second, accounting for almost 15% of responses, was the sense of coming back as a different person, feeling like a stranger in their own home, and forgetting how to be a spouse/parent. These comments were overwhelmingly accompanied by an expressed "desire to have been told what to expect and to have the experience normalized," rather than a desire for help adjusting to and coping with it.

TABLE I. Study 1: Perceived Usefulness of Potential Action Sheet Topics and Whether Information Was Received

Topic	Would Have Been Useful		Did Not Receive	Underserved[a]
	n	%Tot	*n*	%
Predeployment				
Planning for the Separation From Spouse/Partner	28	25	18	64
Making Sure the Spouse/Partner at Home Knows How to Handle Things That Could Come Up	42	38	31	73
Talking With One's Children About Deployment	28	25	22	79
Managing Stress	38	34	21	55
Managing Relationship Conflict	27	24	22	81
Maintaining a Strong Relationship	34	30	26	76
During Deployment				
How to Keep Connected	35	31	20	57
Fears of Infidelity	19	17	18	95
How to Tell if Relationship Is in Trouble and How to Handle It	27	24	26	96
How to Help Your Spouse/Partner If Something Goes Wrong	30	27	28	93
Postdeployment				
Rebuilding Relationship	29	26	22	76
Regaining Role in Family	32	29	23	72
Easing Back Into Parenting	23	21	20	87
Recovering From Infidelity	16	14	15	94
Improving Sex Life	27	24	23	85
How to Show Caring in One's Relationship	26	23	23	88

%Tot, Percentage of total sample who endorsed that information on that topic would have been useful. [a]Proportion of AD members who thought information would have been useful but did not receive it.

TABLE II. Study 1: Most Common Unprompted Relationship Issues Generated by AD Members During Focus Groups

Unprompted Comments by AD Members	*n*	% of Total Comments
(1) Spouse Felt Alone; No Help; Unit Support; Access to Resources	20	23.30
(2) Coming Back As a Different Person; Stranger in Home; Forgot Role in Family Because Gone So Long; Used to Being Alone (Want to Know It's Normal and to Expect It)	13	15.10
(3) Relationship Went Cold; Communicating During Deployment	12	14.00
(4) Family Doesn't Understand; Talking or Not Talking About Deployment Experience	8	9.30
(5) Information for Children; Managing Post-Traumatic Stress Disorder Symptoms Around Children; Single-Parent Support	6	7.00
(6) Formal Service Providers Don't Understand; Mistrust of Resource System	6	7.00
(7) Family Part of Reintegration—Spouse Education	5	5.80
(8) Desensitization; Trouble Connecting to Family	3	3.50
(9) Parenting Conflict	2	2.30

n = number of focus groups (out of 20) in which topic was brought up by a participant.

Third, 13% of responses were specific to the sense of emotional distance from a spouse or partner. These comments were distinct from the sense of strangeness in reintegrating with the functional role and place in the home, and were specific to the "emotional relationship" with the spouse or partner. These comments also included the issues of lack of intimacy and connection while trying to deal remotely with the partner during deployment when a crisis arose, as well as the disintegration of relationships and occurrence of infidelity.

Fourth, 9.3% of responses dealt with feelings that one's family could not understand the AD member's deployed experiences. Although some comments reflected uncontestable beliefs (e.g., "They don't understand"), the expressed desire was more often "whether" to talk about their deployment experiences with their families, rather than "how" to talk about them.

The next most common cluster of comments surrounded children. Needs discussed included how AD members' postdeployment hyperarousal led to overreacting to children; how to talk to children about what is happening predeployment, during deployment, and postdeployment; and members' postdeployment expectations of compliance with instructions (e.g., treating children like troops).

Sixth, there was a robust aversion to formal service providers, mental and behavioral health practitioners, and substance abuse resources. For help with substance abuse, career implications were the primary expressed barrier to seeking services. Career implications were secondarily mentioned as a barrier to other mental health, behavioral health, and family services, but the primary and frequently repeated obstacles seemed to be individual providers themselves (e.g., "they don't really care," "they can't understand our experiences at all," "it's always someone different"). Airmen wanted assistance from those who could empathize with their experiences and whom they could trust.

The seventh most common theme was that the family needs to be thoroughly woven into the reintegration process, provided information in the same forum at the same time with the deploying or homecoming partner. Next were expressions of generalized emotional disconnection from important others in their lives who were not part of the deployed team. This was distinct but related to the primary-relationship-specific disconnection. Finally, Airmen expressed specific concern about fundamental disagreement with the spouse about parenting practices and discipline (e.g., what is correct child behavior, how to respond to misbehavior) and the need to learn how to constructively negotiate the gulf.

STUDY 2: ACTION SHEET FEEDBACK

The themes from the questionnaires and the focus groups were consolidated, and a list of Action Sheet topics to develop was generated (see Table IV). Tri-fold Action Sheets were then drafted. The front panel had the program's logo and the name of the particular Action Sheet. The back panel had a bulleted description of what a multilevel approach is.

The inside material contained two panels summarizing the issue, what research has shown about that issue (in brief, bulleted, magazine-like prose). The third panel was headed "What to Do" and contained evidence-based tips and strategies for dealing with the issue, which the user could apply for inspiration in designing his/her own unique Action Plan.

Consumers complete an Action Plan at the end of a consultation and one was included in each Action Sheet, asking the user to (1) choose a target behavior to adjust, (2) assess what are the pros and cons of their current behavior, (3) create a plan (e.g., when/where/how will the new or changed behavior be enacted, (4) enact the plan, and (5) review the outcome (e.g., How was it enacted? What were the positive and negative outcomes? What changes need to be made to come closer to achieving the goal?).

Study 2 involved having those in the target population (AD members) review and comment on the form and content of the Action Sheets.

Method

Participants

Participants were USAF Security Forces members (n = 235) at Scott AFB (O'Fallon, Illinois) and Laughlin AFB (Del Rio, Texas); 54.7% were junior enlisted (E1–E4); 36.9%

were NCOs (E5–E6); 5.1% were senior NCOs (E7–E9); 3.0% were officers; and 0.4% were civilian employees. The mean number of deployments was 2.3 (SD = 2.2). The largest segment of the sample was in a committed relationship—41.4% married and 22.3% in a committed relationship—whereas 32.6% were single, and 3.8% were separated or divorced (and not currently in a relationship). For those in relationships, the mean length was 4.2 years (SD = 4.5).

Procedure

To evaluate the form and content of the Action Sheets, members of the research team traveled to Scott AFB and Laughlin AFB. Data-gathering sessions were conducted during each shift (day, evening, and night). At the start of each session, the research team gave participants a letter of informed consent and reviewed its contents. There was a waiver of signed informed consent to ensure anonymity. The members of the research team presented participants with a variety of Action Sheets and asked them to evaluate their content; each member rated 2 to 3 sheets.

Measures

Consumer Evaluation Form (CEF[16])

Each participant rated 2 to 3 Action Sheets with the CEF. The first section of the CEF assesses 10 aspects of developed materials, including comprehensibility, clarity, helpfulness, print quality, organization, and length, asking participants to rate the material on 5-point semantic differential scales with opposite adjectives (e.g., from 1 [adjective describing poor quality] to 5 [adjective describing good quality]). The second section, again using 5-point semantic differential scales, asks for an overall assessment of readability, comprehensibility, and usefulness. Additionally, participants rated the sheet's anticipated usefulness to AD members and spouses/partners if used at predeployment, during deployment, and postdeployment.

Usefulness of Action Sheet Topics

Each participant completed a questionnaire that listed all topics for the Action Sheets and asked them to rate the anticipated usefulness of that topic to AD members and to spouses/partners if utilized at predeployment, during deployment, and postdeployment.

Results

USAF Security Forces participants judged the 18 Action Sheet topics to be quite useful overall for predeployment purposes (M = 3.7, SD = 1.3, and M = 3.8, SD = 1.3, for use with AD members and for use with partners/spouses, respectively). The topics' perceived usefulness remained high for use during deployment (M = 3.5, SD = 1.3, and M = 3.7, SD = 1.3 for use with AD members and for use with partners/spouses) and during postdeployment (M = 3.9, SD = 1.3 and M = 4.0, SD = 1.3, for use with AD members and use with partners/spouses, respectively).

TABLE III. Study 2: Overall Evaluations of Draft Action Sheets

Descriptor	*M* (SD)
Organized	4.1 (0.9)
Interesting	3.6 (1.2)
Easy to Find Information	3.9 (1.0)
Clear	4.2 (0.9)
Complete	3.9 (1.0)
Good Length	4.0 (1.1)
Good Print Size	4.3 (0.9)
Good Print Quality	4.3 (0.9)
Good Spacing Between Lines	4.3 (0.9)
Readable	4.4 (0.9)
Understandable	4.4 (0.8)

Likert ratings 1–5 (e.g., 1 = "Poorly organized"; 5 = "Well organized"). Range for all sheets was 1–5.

AD members rated the specific Action Sheets to be generally useful (M = 3.8, SD = 1.2); ratings showed very little variation across ranks. As shown in Table III, Action Sheets were rated as greater than 4.0 on organization, clarity, ease of understanding, readability, and print size and quality and greater than 3.5 on interesting, easy to find important information, complete, and good length. Table IV shows the usefulness ratings for the 18 topics rated and averaged across the three points on the deployment cycle. Almost all of the 18 topics were rated as moderately to very useful—between 3.6 and 3.9 (out of 5).

Finally, participants were given the opportunity to provide qualitative feedback on the 2 to 3 specific Action Sheets each rated. Although comments varied considerably, the majority of AD members believed that the Action Sheets reviewed were helpful and relevant, noting "Deploying is stressful enough—knowing someone cares goes a long way," or "This

TABLE IV. Perceived Usefulness of Draft Action Sheets Topics

Topic	*M* (SD)
Is Our Relationship in Trouble?	3.2 (1.4)
Your Changing Family Role	3.6 (1.1)
Recovering From Infidelity	3.6 (1.3)
Involving Partner in Reintegration	3.6 (1.3)
Fears of Infidelity	3.6 (1.2)
Feeling Disconnected From Others	3.6 (1.1)
Sharing Responsibilities to Manage Work/Home Strain	3.7 (1.4)
Rebuilding Your Relationship	3.7 (0.8)
Rebuilding Intimacy With Your Partner	3.7 (1.3)
Easing Back Into Family Life	3.8 (1.1)
Handling Problems Without Your Partner	3.8 (1.1)
Talking About Deployment Experiences	3.8 (1.1)
Showing You Care	3.8 (1.2)
Operational Stress and Your Relationship	3.8 (1.0)
Talking to Family About Upcoming Deployment	3.8 (1.1)
Couples Coping With Stress	3.8 (1.2)
Maintaining a Strong Relationship During Deployment	3.8 (1.2)
Couples Tackling Money	3.9 (1.0)
Talking With Your Partner About Deployment Experience	4.1 (1.0)

Likert ratings 1 (not useful)–5 (useful).

will help after being deployed while trying to regain that bond between you and your partner." Many made specific suggestions, such as "Most of the information was helpful. I think there should be a listing of numbers and places to call." A minority of the AD members did not care for either the specific sheet rated (e.g., "This pamphlet is very cluttered. The picture doesn't appeal to me.... I would most likely throw this away without reading it more than once") or the approach in general (e.g., "I wouldn't have read this if it wasn't for this situation. I believe pamphlets such as this one are very uninteresting. I understand some may find this helpful, but I don't think very many").

DISCUSSION

Given that many AD members' distrust formal services—noted repeatedly in the focus groups of returning members—a multilevel approach that includes the capacity for self-directed uptake of coping skills, addresses some of the resistance that AD members express toward behavioral health prevention efforts. This study undertook the first two steps of developing a multilevel approach—eliciting the target population's topics of highest interest and those for which they are most underserved by current prevention offerings and receiving feedback on content developed in response to these needs.

In Study 1, nearly all of the 16 relationship topics rated were endorsed by at least 25% to 33% of participants as being useful; however, for almost all topics, 70% to 95% of participants reported being underserved (i.e., not receiving needed information).

By combining the topics that were of high-anticipated usefulness and helpfulness from the questionnaire and focus groups, we generated Action Sheets on 18 relationship issues. In Study 2, we had AD members (two Security Forces squadrons, with all participants independent from those in Study 1) who gave feedback on the form and content of the Action Sheets. Overall, AD members believed that the Action Sheets were moderately to very useful and were presented well, had pithy but comprehensive information and conveyed the content well.

Before developing and pilot testing the multilevel approach, prevention developers need to identify materials that will foster uptake. This project emphasized a collaborative, "bottom up" approach, with potential consumers serving to guide the content that would be delivered and giving feedback on the way it was delivered. The topic generation also helped guide development of materials for more intensive levels not discussed here (e.g., a series of group sessions; individualized couples' prevention sessions) but which complete the multilevel offerings.

Security Forces is the largest career field in the USAF and the participants in Study 1 served in a type of mission typically conducted by the U.S. Army or Marines. Their experiences may therefore be instructive for other branches. Nevertheless, the participants of this study may not be representative of either Airmen overall or of Soldiers, Sailors, or Marines. Needs of AD members from other service branches will be likely largely similar but would need to be studied further.

Future research is necessary to test the efficacy of a multilevel approach in preventing negative behavioral health and relationship outcomes. This study indicates that this approach may be a useful complement to formal services to meet the needs that military members currently identify as being underserved. Implementing a dissemination vector among trusted community resources may be especially useful in an environment where formal services are distrusted.

In conclusion, no multilevel approach to military couples' problems exists, despite (a) the strong research support for such an approach in civilian communities focused on improving a similar target (parenting); (b) the large evidence base that could be marshaled to support such an approach; and (c) the underserved needs of couples with an AD member. This research represents the first evidence-based attempt at filling this gap.

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